What works? What fails?

FINDINGS FROM THE NAVRONGO COMMUNITY HEALTH AND FAMILY PLANNING PROJECT

Vol. 2, No. 9, March 2002 Navrongo Health Research Centre

WHAT KEEPS THE WHEELS TURNING?

Communities in the Kassena-Nankana district where Community Health Officers (CHO) live and provide health services are distant from health facilities. Compounds in the communities are far apart and no serviceable roads exist to connect them. For community members, walking from one compound to another is a simple matter, but for the health worker who has to provide door-to-door health care, a means of transportation is indispensable to the provision of quick and quality health services. The motorbike comes in handy—it is the office of the CHO—a hospital on wheels. The motorbike is as versatile as its rider—in dew or in dust, health care can still reach the most remote communities and the farthest compounds on a regular basis. When parked in front of the Community Health Compound (CHC), her local residence which also doubles as the community clinic, it indicates that she is available for consultation. This usually happens in the morning after she returns from compound visitation. A nurse would normally leave the CHC as early as 6:00am and be back by 10:00am to attend to her clients who, by the time she returns, will already have lined up at the CHC.

First things first—A CHO checks her motorbike before riding off

CHO have speedily mastered motorbiking skills. They meander through a maze of footpaths with admirable agility to bring health care to those who need it most. Although sometimes forced to abandon her motorbike when confronted with hostile terrain, it is now almost unthinkable to talk of a CHO without mentioning her motorbike.

Tough times don't last but tough bikes do

Motorbike riding is now part of the curriculum of Community Health Nurses' Training Schools. Training not only teaches basic riding skills, but covers fundamental maintenance as well. The importance of this component of the Community Health and Family Planning Project (CHFP) is underscored by the employment of two full-time mechanics by the Navrongo Health Research Centre (NHRC) and a Workshop Manager who is a General Motors Senior Mechanic. This highly skilled staff ensures proper maintenance of the Centre's motorbikes.

Routine maintenance

Use of motorbikes for community health service delivery is very intensive. Regular maintenance is an absolute necessity if the life span of these motorbikes is to be prolonged. Routine maintenance is carried out based on a scheduled period. This may be based on the number of kilometres covered as advised by the manufacturers or on a monthly schedule drawn up by the garage. During routine maintenance, lubricants are

replaced and parts are greased. Engine performance is also checked, loose parts are adjusted, and worn out or damaged parts are replaced.

Preventive maintenance

Weekly preventive maintenance is carried out on the motorbikes when they return from the field. Mechanics check for minor problems that might have arisen during use and include checking engine performance and other minor repair work.

Repairs

Repairs are carried out on the motorbikes whether or not the motorbike is due for routine or preventive maintenance. When a part of the motorbike is damaged or worn out, repairs or parts replacement are carried out immediately. If parts are not readily available the motorbike is grounded until parts have been procured. These checks are to ensure that, while on duty, at least the motorbike should never leave its rider on the way. According to the Workshop Manager who oversees the maintenance of the CHFP motorbikes, experience has shown that the Yamaha brand is ideal for the CHO. At the moment the fleet includes Yamaha Escort, YT, Super and AG. Use records have proved that the AG 100 is robust and appropriate for even the most inhospitable terrain that a CHO may confront in her daily service operations.

The period between zero and 1000 kilometres is the most important period in the life of a motorbike. The engine is brand new and its various parts wear and polish themselves to the correct operating clearances. Care must therefore be taken not to put excessive load on the engine for the first 1000 kilometres. With due adherence to manufacturer guidelines, the general routine maintenance procedures for CHFP motorbikes is to replace the transmission oil after the first 500 kilometres. Thereafter, the motorbike goes for regular service every four weeks. Periodic inspection, adjustment and lubrication will keep the motorbike in the safest, most efficient condition possible. The motorbike goes for major maintenance after the first 1000 kilometres. During this period the oil is changed and carbon fumes are removed from the exhaust system. If these important points of motorbike maintenance are maintained, a machine *should* last up to five years without major problems. Yet, despite these precautionary measures, motorbike replacement must occur every three years due to weather conditions, harsh terrain, and intensive use.

A large fleet of motorbikes to choose from

Though accidents are very rare and fatalities almost unheard of, carelessness has been noted among some of the riders. Some nurses are known for speeding and a few others have been observed deliberately or inadvertently allowing their spouses or relatives to ride the bikes in clear contradiction of the rules governing machine use. This particular offence has attracted a penalty: The privilege of using the motorbikes over the weekend has been withdrawn. CHO are now required to return all motorbikes to the CHFP every Friday evening and pick them again on Monday morning.

Motorbike tyres usually last for up to three months. A 100cc motorbike is the minimum size of machine that can withstand daily CHO use. Less powerful machines have been tried, but have been shown to be uneconomical in the long run. Nine litres of fuel per week is what a CHO needs and receives for her work.

Conclusion

With the above maintenance guidelines, nurses enjoy the comfort of riding their motorbikes with less fear of having major problems with them while they are in their communities far away from town.

Send questions or comments to: What works? What fails?
Navrongo Health Research Centre, Ministry of Health, Box 114, Navrongo, Upper East Region, Ghana
What_works?@navrongo.mimcom.net

This series has been launched to share experiences with people in Ghana and elsewhere around the world about what has worked and what has failed in an experiment to make primary health care widely accessible to rural people. The Kassena-Nankana community, whose active participation made *The Navrongo Experiment* possible, are hereby duly acknowledged. This publication was made possible through support provided by the Office of Population, Bureau for Global Programs, Field Support & Research, U.S. Agency for International Development, under the terms of Award No. HRN-A-00-99-00010. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development. Additional support was provided by a grant to the Population Council from the Bill and Melinda Gates Foundation.